

What is claimed is:

1. A method for balancing resource loads, comprising:
 - receiving a work request;
 - determining for each of a plurality of service locations a probability of servicing said work request within a target time;

5 selecting at least a first service location having at least one of a greatest determined probability of servicing said work request within said target time and a sufficient determined probability of servicing said work request within said target time;

and

assigning said work request to said selected service location.

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2. The method of Claim 1, wherein said step of selecting at least a first service location comprises selecting at least a first service location having a sufficient determined probability of servicing said work request within said target time.
3. The method of Claim 1, wherein said step of selecting at least a first service location comprises selecting at least a first service location having a greatest determined probability of servicing said work request within said target time.
4. The method of Claim 1, wherein said step of determining for each of a plurality of service locations a probability of servicing said work request within a target time comprises determining a relative probability of servicing said work request within a target time.

5. The method of Claim 1, wherein said probability of servicing said work request within a target time is determined for a service location by calculating a number of opportunities to service said work request within said target time by said service location.

6. The method of Claim 5, wherein selecting at least a first service location comprises selecting at least a first service location having at least a selected minimum number of opportunities to service said work request within said target time.

7. The method of Claim 5, wherein said step of selecting at least a first service location comprises selecting at least a first service location having a greatest number of opportunities to service said work request within said target time.

8. The method of Claim 5, wherein said number of opportunities (#OPPS) is calculated as $\text{#OPPS} = ((\text{Target time} - \text{EWT}) / \text{WAT}) + 1$, where EWT is the estimated wait time for a work request assigned to said service location, and where WAT is the weighted advance time for a work request assigned to said service location.

9. The method of Claim 5, further comprising, in response to more than one service location having a greatest calculated number of opportunities to service said work request within said target time, calculating an advance time metric.

10. The method of Claim 9, wherein said advance time metric comprises an expected wait time, wherein said step of selecting comprises selecting a location having a lowest expected wait time.

11. The method of Claim 9, wherein said advance time metric comprises a weighted advance time trend, wherein said step of selecting comprises selecting a location having a lowest weighted advance time trend.

12. The method of Claim 11, wherein said weighted advance time trend (WAT_Trend) is calculated as $WAT_Trend_n = (x * WAT_Trend_{n-1}) + ((1-x) * WAT_Change)$, where x is a constant, and where the WAT_Change is calculated as $WAT_Change = (WAT_n - WAT_{n-1}) / WAT_{n-1}$.

13. The method of Claim 1, wherein each of said service locations is associated with a queue capable of containing a plurality of work requests.

14. The method of Claim 1, wherein said service location comprise at least one split.

15. The method of Claim 1, further comprising:
selecting a target time for completing a work request.

16. A load-balancing apparatus, comprising:

means for receiving a work request;

means for calculating a probability that a service location is capable of servicing said work request within a target time;

5 means for selecting a service location having at least one of a highest probability of servicing said work request within said target time and a sufficient probability of servicing said work request within said target time; and

means for allocating said work request to said selected service location.

17. The apparatus of Claim 16, wherein said service location is associated with a queue and comprises at least one associated resource.

18. The apparatus of Claim 16, wherein said service location comprises a split.

19. The apparatus of Claim 16, further comprising means for calculating an advance time metric.

20. A work allocation apparatus, comprising:

 a plurality of service locations;

 a plurality of service resources, wherein at least one of said service resources is associated with each of said service locations;

5 a communication network interface, operable to receive work requests; and

 a controller, wherein a work request received at said communication network interface is assigned to a service location having at least one of a highest probability of servicing said work request within a predetermined target time and a sufficient probability of servicing said work request within a predetermined target time.

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21. The apparatus of Claim 20, wherein said service resources comprise service agents.

22. The apparatus of Claim 20, wherein said service resources are organized into splits.

23. The apparatus of Claim 20, wherein said work request is associated with a request for assistance.

24. The apparatus of Claim 20, wherein said communication network interface is interconnected to at least one of an Internet protocol network and a public switched telephone network.

25. The apparatus of Claim 20, wherein said service locations each comprise a server.

26. A computational component for performing a method, the method comprising:

receiving a work request;

calculating for each of a plurality of service locations a probability that said work request will receive service within a target time period;

5 selecting at least one a one of said plurality of service locations having at least one of a greatest probability of servicing said work request within said target time period and a sufficient probability of servicing said work request within said target time period;

and

10 assigning said work request to one of said selected service locations.

27. The method of Claim 26, wherein said step of calculating a probability comprises calculating a relative probability.

28. The method of Claim 29, wherein said calculated probability comprises a calculated number of opportunities that a service location will have to service said work request within said target time period.

29. The method of Claim 28, wherein said number of opportunities (#OPP) is given by: $\#OPP=((\text{Target time}-\text{EWT})/\text{WAT})+1$, where EWT is an expected wait time for said service location, and where WAT is a weighted advance time for said service location.

30. The method of Claim 26, further comprising:
in response to a number of service locations having an equal calculated probability, calculating an advance time metric for each of said number of service locations.

31. The method of Claim 30, wherein said calculating an advance time metric comprises:

calculating a weighted advance time;
calculating a weighted advance time change;
calculating a weighted advance time trend; and
wherein said step of selecting a one of said plurality of service locations comprises selecting a service location with a lowest calculated weighted advance time trend.

32. The method of Claim 31, wherein said weighted advance time change (WAT_Change) is given by $WAT_Change = (WAT_n - WAT_{n-1})/WAT_{n-1}$, where WAT_n is the weighted advance time most recently calculated, and where WAT_{n-1} is a previously calculated weighted advance time, wherein said weighted advance time trend (WAT_Trend) is given by $WAT_Trend_n = (x * WAT_Trend_{n-1}) + ((1-x) * WAT_Change)$, where x is a constant.

33. The method of Claim 30, wherein said calculating an advance time metric comprises calculating an estimated waiting time.

34. The method of Claim 26, further comprising:
selecting a target time for servicing a work request.